

Source Water Assessment Report



Public Water Supply: KONZA VALLEY WATER BENEFIT DISTR

**Assessment Areas Include:
683**



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Reports were generated with the Automated Source Water Assessment Tool (ASWAT). Assessments were completed online using ASWAT by hundreds of state employees, public water supply staff, and technical assistant providers throughout the State of Kansas.

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Report Description

Detailed Explanation of Entire Report:

The 1996 amendments to the Safe Drinking Water Act require each state to develop a Source Water Assessment Program (SWAP) and a Source Water Assessment (SWA) for each Public Water Supply (PWS) that treats and distributes raw source water. In Kansas there are 761 public water supplies that require SWAs. A SWA includes a delineation of the source water assessment area, an inventory of potential contaminant sources, and a susceptibility analysis.

A PWS can consist of one or more individual assessment areas that require different assessments. In general, an assessment area is delineated at a two-mile fixed radius for a groundwater well. A surface water intake assessment area is the upstream-drainage area (watershed), inside the state border. Additionally, an assessment area can consist of an individual well, group of wells, an individual surface water intake, or multiple surface water intakes.

After each assessment is completed a report is automatically generated using an Internet-based application called the Automated Source Water Assessment Tool (ASWAT). The individual assessment reports combine to form the entire SWA report for a PWS.

A map of each Assessment Area was also generated with ASWAT. However, for security reasons the maps are not included in this report. To obtain a copy of the map(s), please contact your local PWS.

All PWS reports will be available for viewing and downloading on KDHE's Watershed Management Section website(<http://www.kdhe.state.ks.us/nps>) in 2004.

KONZA VALLEY WATER BENEFIT DISTR Summary:

AA	Type	Diversion Id
683	Ground water multiple wells	003, 001

Public Water Supply: **KONZA VALLEY WATER BENEFIT DISTR**
Assessment Area: **683**
Diversion Id's: **003, 001**
Status: **Accepted**
Submit Date: **2003-03-07 09:36:10**

Executive Summary:

The Executive Summary gives the assessment area's Susceptibility Likelihood Score (SLS) for each contaminant of concern category.

SLS indicates which contaminant category is most likely to impact a given public water supply. Contaminants of concern for groundwater include microbiological, inorganic compounds, nitrates, synthetic organic compounds, pesticides, and volatile organic compounds. Contaminants of concern for surface water include microbiological, inorganic compounds, eutrophication – phosphorus, sedimentation, synthetic organic compounds, pesticides, and volatile organic compounds.

To determine the assessment area's susceptibility to contamination, a qualitative (semi-quantitative) screening level susceptibility analysis was designed that utilizes general assumptions and best professional judgement. It is a systematic procedure comprised of simple yes/no questions. Each question in the susceptibility analysis focuses on the presence or absence of potential pollution sources in the assessment area. SLS is most useful in helping the Public Water Supply (PWS) focus on water quality protection actions towards a contaminant category of concern. For example, if the SLS for microbiological contamination is high, relative to volatile organic compounds (VOC), water supply protection planners would conclude that the attention should be directed towards microbiological contaminant sources rather than VOC sources.

Executive Summary

Public Water Supply: **KONZA VALLEY WATER BENEFIT DISTR**

Assessment Area: **683**

Susceptibility Likelihood Scores for Assessment Area

Contaminant Category	A	B	B*	C	C*	D
Susceptibility Likelihood Score – SLS	69	66	69	76	68	76
SLS Range	Mid	Mid	Mid	Mid	Mid	Mid

A – Microbiological

B* – Nitrates

C* – Pesticides

B – Inorganic Compounds

C – Synthetic Organic Compounds

D – Volatile Organic Compounds

Susceptibility Likelihood Range

SLS Range	
0–50	Low Susceptibility
51–80	Moderate Susceptibility
81–100	High Susceptibility

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Potential Sources:

The Potential Sources section lists all the sites that have been identified as potential sources of contamination.

Potential sources of contamination may include land uses, industry, or businesses that could generate or store chemicals/substances that could potentially contaminate the water supply only if released into the environment. Both unregulated sites from business location databases and regulated sites from various KDHE databases were compiled. Additional sites could have been added by an evaluator through the assessment process to supplement the original data.

The 1987 Standard Industrial Classifications (SIC) were used to identify potential contaminate sites. The SIC system classifies establishments into industries on the basis of the primary activities of the establishment.

Each assessment area is delineated with 3 assessment zones. These zones can be used to get a general understanding of the potential influence sites have based on proximity to the water supply. Zone A is a 100-foot radius around a groundwater well and a 1000-foot radius around a surface water intake. Zone B is a 2000-foot radius around wells and a hydrological delineated buffer around the surface water sources. Zone C is a 2-mile radius around wells and the balance of the watershed for intakes. The potential sources listed in this section are sorted to show all the potential sources in Zone A first, Zone B second, and Zone C third.

Although a facility or business is identified in the study as a potential concern, it does not necessarily mean a release or spill has occurred. Contamination could only occur if certain chemical substances are released into the environment and filter into the water supply source.

The data for the potential sources of contamination was compiled from May through August in 2002. Some of the databases used were incomplete datasets that are continually being updated. Due to the incompleteness, inaccuracies, and new development, it is possible that sources of potential contamination that are in the assessment area are not included in the report. Inaccurate locations could also cause sources to show up in the assessment area that are not actually in the assessment. Additionally, duplication between the datasets could cause sites to show up multiple times in the assessment area.

Potential Sources

Public Water Supply: **KONZA VALLEY WATER BENEFIT DISTR**
Assessment Area: **683**

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
140896	General Farm, Primarily Crop	191	C
139835	Veterinary Services, Specialties	742	C
140070	Veterinary Services, Specialties	742	C
140370	Veterinary Services, Specialties	742	C
140775	Veterinary Services, Specialties	742	C
139730	Animal Specialty Services	752	C
139852	Animal Specialty Services	752	C
138959	Single-family Housing Construction	1521	C
139718	Single-family Housing Construction	1521	C
139755	Single-family Housing Construction	1521	C
139864	Single-family Housing Construction	1521	C
139917	Single-family Housing Construction	1521	C
139918	Single-family Housing Construction	1521	C
140142	Single-family Housing Construction	1521	C
140485	Single-family Housing Construction	1521	C
140646	Single-family Housing Construction	1521	C
140647	Single-family Housing Construction	1521	C
140848	Single-family Housing Construction	1521	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
139719	Nonresidential Construction	1542	C
139720	Nonresidential Construction	1542	C
139947	Nonresidential Construction	1542	C
139046	Highway and Street Construction	1611	C
139721	Highway and Street Construction	1611	C
140092	Highway and Street Construction	1611	C
140201	Newspapers Publishing and Printing	2711	C
140524	Newspapers Publishing and Printing	2711	C
139649	Commercial Printing–Lithographic	2752	C
139936	Commercial Printing–Lithographic	2752	C
140177	Commercial Printing–Lithographic	2752	C
140741	Commercial Printing–Lithographic	2752	C
139747	Commercial Printing NEC	2759	C
139883	Commercial Printing NEC	2759	C
140599	Commercial Printing NEC	2759	C
139017	Asphalt Paving Mixtures And Blocks Manufacturing	2951	C
139893	Rubber and plastics hose and belting Manufacturing	3052	C
139953	Metal Doors, Sash, and Trim Manufacturing	3442	C
139919	Machinery, Except Electrical Manufacturing	3599	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
140193	Machinery, Except Electrical Manufacturing	3599	C
139850	Aircraft Equipment Manufacturing	3728	C
139715	Signs and Advertising Display Manufacturing	3993	C
140893	Farm Product Warehousing and Storage	4221	C
139895	Refuse Systems	4953	C
140110	Scrap and Waste Materials	5093	C
140727	Scrap and Waste Materials	5093	C
139701	Gasoline Service Station	5541	C
139706	Gasoline Service Station	5541	C
139891	Gasoline Service Station	5541	C
140081	Gasoline Service Station	5541	C
140508	Gasoline Service Station	5541	C
140601	Gasoline Service Station	5541	C
140484	Dry Cleaner	7216	C
140392	Photofinishing Laboratory	7384	C
139854	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
139856	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
140030	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
140136	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
140716	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
140717	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
140728	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
140771	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
140863	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
140868	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
139717	Auto Truck Repair Service	7538	C
139750	Auto Truck Repair Service	7538	C
139855	Auto Truck Repair Service	7538	C
139863	Auto Truck Repair Service	7538	C
139896	Auto Truck Repair Service	7538	C
139898	Auto Truck Repair Service	7538	C
139921	Auto Truck Repair Service	7538	C
139948	Auto Truck Repair Service	7538	C
140169	Auto Truck Repair Service	7538	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
140174	Auto Truck Repair Service	7538	C
140558	Auto Truck Repair Service	7538	C
140565	Auto Truck Repair Service	7538	C
140566	Auto Truck Repair Service	7538	C
140577	Auto Truck Repair Service	7538	C
140615	Auto Truck Repair Service	7538	C
140831	Auto Truck Repair Service	7538	C
139949	Car Wash	7542	C
139959	Car Wash	7542	C
140021	Car Wash	7542	C
140609	Car Wash	7542	C
140639	Car Wash	7542	C
140102	Repair Services, Nec	7699	C
140139	Repair Services, Nec	7699	C
140568	Repair Services, Nec	7699	C
140606	Repair Services, Nec	7699	C
140832	Repair Services, Nec	7699	C
140714	Racing, Including Track Operation	7948	C

Regulated Confined Animal Feeding Operations Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
2001390	Sunflower Farms	A-KSRL-SA01	C

Regulated Hazardous Waste Potential Site Sources

Did Not Contain Any Of These Potential Site Sources

Regulated Leaking Storage Tank Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
3000044	Benny's Short Stop	00241	C
3000123	Conoco, De Dee's	01498	C
3000126	Coastal Mart #9131 (now Short Stop)	01507	C
3000128	Skelly Service, Jerry's	01518	C
3000296	Western Auto	03642	C
3000370	Refuse Control	04557	C
3000371	Kershaw Concrete	04602	C
3000484	Usd 383, Manhattan	05955	C
3000703	Town Country #49	06984	C
3000729	Mini Mart #1	07127	C
3000992	Clays Auto Service	12836	C
3001055	Goetsch Irvine Chrysler	14919	C
3001172	Rickels 3.2 (rexs Tire)	19242	C
3001261	Vic's 66	23141	C
3001378	Reliable Transfer Storage	24536	C
3001395	Manhattan Transit	25044	C

Regulated Leaking Storage Tank Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
3001608	Campbell Distributing Co	26129	C
3001778	Coleman American Moving	26863	C
3001817	Ups, Manhattan	27050	C
3001937	Firestone Store	27549	C
3001958	Ady's Appliances (former Sears Roebuck)	27618	C
3001996	K-b Inc	27944	C
3002024	Jon Murdock Chev	28152	C
3002284	Riley Co Police Dept	29481	C
3002407	Tri Lakes Distributing	40439	C
3002686	Brickei Construction	81279	C
3002690	Small Engine Repair	81287	C
3002772	Kdot, Manhattan	81466	C
3002803	Crubel, Don	81562	C

Regulated Identified Contaminated Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
7000810	MANHATTAN PWS WELLS #14 #15	C507503042	C
7000811	MANHATTAN PWS PESTICIDES	C507570795	C
7000825	ANTI-PEST	C508100430	C
7000826	FAIRLANE SALVAGE	C508103009	C
7000828	FMGP – MANHATTAN	C508170030	C

Regulated Identified Contaminated Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
7000830	FERRELLGAS – MANHATTAN	C508170995	C
7000833	BAYER CONSTRUCTION	C508171328	C

Regulated Solid Waste Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
5000195	City of Wamego	0201–S	C
5000511	Bayer Construction Co., Inc.	0495–S	C

Regulated Waste Water Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
6000027	FAIRMONT MOBILE HOME PARK	C–KS38–NT07	B
6000115	BRIGGS JEEP–EAGLE–ISUZU – EAST	I–KS38–PO06	C
6000253	BLUE TOWNSHIP	M–KS75–OO02	C
6000674	MCCALL PATTERN COMPANY	I–KS38–CO01	C
6001246	MANHATTAN MWTP	M–KS38–OO01	C
6001247	MANHATTAN MWTP	M–KS38–OO01	C
6001248	MANHATTAN MWTP	M–KS38–OO01	C
6002008	PARKER HANNIFIN CORPORATION	P–KS38–OO01	C

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Added Sources:

The Added Sources section lists all the sites that have been added as potential sources of contamination by an evaluator through the assessment process to supplement the original data.

The potential sources listed in this section are sorted to show the added potential sources in Zone A first, Zone B second, and Zone C third.

Although a facility or business was added as a potential concern, it does not necessarily mean a release or spill has occurred. Contamination could only occur if certain chemical substances are released into the environment and filter into the water supply source.

Added Sources

Public Water Supply: **KONZA VALLEY WATER BENEFIT DISTR**
Assessment Area: **683**

Added Potential Site Sources

Source No.	Source Name	SIC ID	Zone
Did Not Add Any Site Sources			

Public Water Supply: **KONZA VALLEY WATER BENEFIT DISTR**
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Potential Contaminants Summary:

The Contaminants Summary shows the number of identified unregulated sources in the assessment area for each contaminant of concern category.

In order to obtain the number of sources for each category, a relationship was correlated between each Standard Industrial Classification (SIC) and the contaminant of concern categories. Each SIC was assessed and associated with contaminant categories. For example, if not managed properly, a car wash (SIC 7542) could potentially contaminate an intake because of inorganic compounds (IOC) and volatile organic compounds (VOC); thus, a car wash is associated with IOCs and VOCs.

A chart displays a count for each contaminant category. The sum for each category represents the total number of identified sources that have been associated with that particular contaminant category. However, the total number of identified sources does not include contaminants from the Added Sources. In our example, a car wash would be considered 2 sources of contamination. It would be a potential source of contamination for IOCs and for VOCs; thus, 1 would be added to the total number of sources in the VOC category and 1 would be added to the IOC category.

Potential Contaminants Summary

Public Water Supply: **KONZA VALLEY WATER BENEFIT DISTR**
Assessment Area: **683**

Number of Unregulated Site Sources Identified for each Contaminant Category

MicroBiological	Pesticides	IOC's	SOC's	VOC's	Nitrates
18	2	71	21	57	15

A – Microbiological

B* – Nitrates

C* – Pesticides

B – Inorganic Compounds

C – Synthetic Organic Compounds

D – Volatile Organic Compounds

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Potential Contaminants Listing:

The Potential Contaminants section lists the contaminant of concern category associated with each Standard Industrial Classification (SIC) found in an assessment area. A complete list of contaminant category codes are located at the bottom of this page.

The relationships defined between the Standard Industrial Classifications (SIC) and the contaminant of concern categories are displayed in a table format. Using our car wash example, the relationships can be better illustrated. A car wash could release IOC and VOC chemical substances. The connection is shown by indicating the SIC, 7542, and the associated contaminant categories, IOC (Category B) and VOC (Category D). However, the contaminants listed are not associated with any Added Sources.

The list is sorted by the SIC source description and it only shows unique SIC sources. For example, an assessment area can have 20 car washes in an assessment area, but the list is only going to show contaminant categories associated with car washes onetime. This is because all car washes have the same SIC and every car wash poses the same potential threat to water intakes.

A – Microbiological **B** – Inorganic Compounds **B1** – Eutrophication – Phosphorous
B2 – Sedimentation **B*** – Nitrates **C** – Synthetic Organic Compounds
C* – Pesticides **D** – Volatile Organic Compounds

Potential Contaminants Listing

Public Water Supply: **KONZA VALLEY WATER BENEFIT DISTR**
Assessment Area: **683**

Unregulated Identified Site Sources and associated Potential Contaminant Category

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
3728	Aircraft Equipment Manufacturing	inorganics, VOCs	B
"	"	"	D
2951	Asphalt Paving Mixtures And Blocks Manufacturing	inorganics, VOCs	B
"	"	"	D
7538	Auto Truck Repair Service	Inorganics, VOCs	B
"	"	"	D
7542	Car Wash	Inorganics, VOCs	B
"	"	"	B1
"	"	"	B2
"	"	"	D
7216	Dry Cleaner	Nitrates, phosphorous, VOCs	B
"	"	"	D
5541	Gasoline Service Station	Inorganics, VOCs	B
"	"	"	D
1611	Highway and Street Construction	Sedimentation	B2
3599	Machinery, Except Electrical Manufacturing	inorganics, VOCs	B
"	"	"	D

Unregulated Identified Site Sources and associated Potential Contaminant Category.

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
3442	Metal Doors, Sash, and Trim Manufacturing	inorganics	B
"	"	"	D
1542	Nonresidential Construction	Sedimentation	B2
7384	Photofinishing Laboratory	NA	B
"	"	"	D
3052	Rubber and plastics hose and belting Manufacturing	Inorganics, metals, VOCs	B
"	"	"	D
5093	Scrap and Waste Materials	Metals, TSS	B
3993	Signs and Advertising Display Manufacturing	inorganics, VOCs	B
"	"	"	D
1521	Single-family Housing Construction	Oil, Paint, Pesticides, Fertilizers	A
"	"	"	B1
"	"	"	B2
"	"	"	B*
"	"	"	C
7532	Top, Body, and Upholstery Repair Shops and Paint Shops	Inorganics, VOCs	B
"	"	"	D
742	Veterinary Services, Specialties	Sanitary, Inorganics TSS	A
"	"	"	B

Unregulated Identified Site Sources and associated Potential Contaminant Category.

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
752	Animal Specialty Services	Sanitary, fertilizers	A
"	"	"	B
"	"	"	B1
"	"	"	B2
"	"	"	B*
2759	Commercial Printing NEC	Inorganics, VOCs, Semi volatiles	B
"	"	"	C
"	"	"	D
2752	Commercial Printing–Lithographic	Inorganics, VOCs, Semi volatiles	B
"	"	"	C
"	"	"	D
4221	Farm Product Warehousing and Storage	TSS, VOCs	B
"	"	"	D
191	General Farm, Primarily Crop	fertilizers, Pesticides	B
"	"	"	B1
"	"	"	B2
"	"	"	B*
"	"	"	C*
2711	Newspapers Publishing and Printing	Inorganics, VOCs, Semi volatiles	B

Unregulated Identified Site Sources and associated Potential Contaminant Category.

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
2711	Newspapers Publishing and Printing	Inorganics, VOCs, Semi volatiles	C
"	"	"	D
7948	Racing, Including Track Operation		NA
4953	Refuse Systems	ALL	A
"	"	"	B
"	"	"	B1
"	"	"	B2
"	"	"	B*
"	"	"	C
"	"	"	C*
"	"	"	D
7699	Repair Services, Nec	inorganics	B

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Protection Measures:

The Protection Measures section shows water quality protection measures for the Standard Industrial Classifications (SIC) identified in the assessment area.

Previous sections of this report are designed to show areas that Public Water Supplies (PWS) can focus on to improve the susceptibility of an assessment area. This section helps identify water quality protection measures that a PWS can use as guidance for implementing action for a potential contaminant site in the assessment area. It focuses on protection measures that can reduce the risk of contamination to the water supply.

This portion of the report only displays water quality protection measures for each type of SIC found in the assessment area. It does not display protection measures for each site in the assessment area because every SIC should have the same or similar water quality protection management practices. However, the protection measures listed are not associated with any Added Sources.

Protection Measures

Public Water Supply: **KONZA VALLEY WATER BENEFIT DISTR**
Assessment Area: **683**

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
3728	Aircraft Equipment Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	40 CFR 464 and State or federal Storm water pollution prevention regulations
2951	Asphalt Paving Mixtures And Blocks Manufacturing	inorganics, VOCs	Collect and pre-treat wastewater. Control storm water runoff. Minimize ground contamination with petroleum or other products. Control storm water runoff to minimize TSS transport	40 CFR 443 and State or federal Storm water pollution prevention regulations
7538	Auto Truck Repair Service	Inorganics, VOCs	Discharge to POTW. Manage oil products and used oil so that it is not in contact with water	40 CFR 442 and
7542	Car Wash	Inorganics, VOCs	Install and maintain sediment and grease traps where appropriate	40 CFR 442
7216	Dry Cleaner	Nitrates, phosphorous, VOCs	Discharge to POTW. Recycle chemicals	NA
5541	Gasoline Service Station	Inorganics, VOCs	Maintain area to minimize fuel contamination	NA

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
1611	Highway and Street Construction	Sedimentation	Erosion and Sediment Control	KAR 28–16, KDHE
3599	Machinery, Except Electrical Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	State or federal Storm water pollution prevention regulations
3442	Metal Doors, Sash, and Trim Manufacturing	inorganics	Minimize outdoor storage and control storm water runoff. Pre-treat process wastewater prior to discharge to POTW	State or federal Storm water pollution prevention regulations
1542	Nonresidential Construction	Sedimentation	Erosion and Sediment Control	KAR 28–16, KDHE
7384	Photofinishing Laboratory	NA	Discharge to POTW. Recycle chemicals	CFR 40 459
3052	Rubber and plastics hose and belting Manufacturing	Inorganics, metals, VOCs	Pre-treat wastewater prior to discharge. Minimize outdoor storage and control storm water runoff.	40 CFR 428 and State or federal Storm water pollution prevention regulations

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
5093	Scrap and Waste Materials	Metals, TSS	Minimize contact with storm water	State or federal Storm water pollution prevention regulations
3993	Signs and Advertising Display Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	40 CFR 459 and State or federal Storm water pollution prevention regulations
1521	Single-family Housing Construction	Oil, Paint, Pesticides, Fertilizers	Proper cleaning and disposal of household hazardous waste. Proper storage, application, and clean up of pesticides and fertilizers	KAR 28–48, KDHE, KDEM
7532	Top, Body, and Upholstery Repair Shops and Paint Shops	Inorganics, VOCs	Discharge to POTW. Recycle where appropriate. Properly maintain oil product and waste. Manage paint and solvent wastes properly	NA
742	Veterinary Services, Specialties	Sanitary, Inorganics TSS	Discharge to POT	NA
752	Animal Specialty Services	Sanitary, fertilizers	Collect and treat wastes.	NA

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
2759	Commercial Printing NEC	Inorganics, VOCs, Semi volatiles	Recycle chemicals where possible. Discharge to POTW	40 CFR 459 and State or federal Storm water pollution prevention regulations
2752	Commercial Printing–Lithographic	Inorganics, VOCs, Semi volatiles	Recycle chemicals where possible. Discharge to POTW	40 CFR 459 and State or federal Storm water pollution prevention regulations
4221	Farm Product Warehousing and Storage	TSS, VOCs	Keep the area clean of grain. Use grease traps.	State or federal Storm water pollution prevention regulations
191	General Farm, Primarily Crop	fertilizers, Pesticides	Maintain good erosion control practices and minimize the use of chemicals	NA
2711	Newspapers Publishing and Printing	Inorganics, VOCs, Semi volatiles	Recycle chemicals where possible. Discharge to POTW	40 CFR 459 and State or federal Storm water pollution prevention regulations
7948	Racing, Including Track Operation	NA	Discharge to POTW. Minimize use of lawn chemicals. Use good erosion control practices	NA

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
4953	Refuse Systems	ALL	Store wastes properly in order to minimize contact with storm water.	Maintain the lagoon or storage vessel properly. Control storm water run on and runoff to minimize contamination of storm water
7699	Repair Services, Nec	inorganics	Discharge to POTW	NA

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Assessment Analysis:

The Assessment Analysis section displays the numbers assigned to each contaminant of concern category for each question in the susceptibility analysis.

This analysis is based on a decision tree framework consisting of a series of yes/no questions. These questions consider the proximity of contaminant sources to the water supply intake, the type of contaminant, and the application of pollution prevention or water quality protection practices to sources of contamination. As the evaluator moves through the analytical framework, susceptibility points are accumulated based on the presence of contaminant sources in the assessment area.

After all the questions have been answered, the SLS is calculated for each contaminant of concern category. The SLS is determined by counting the number of contamination risk factors found to occur in the delineated assessment area and applying a multiplier to this number. Because the number of contaminant category risk factors is not equal, the multiplier is used to establish a common scale for the SLS of each contaminant category.

Assessment Analysis

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Ground Water Multiple Wells Analysis

A – Microbiological **B** – Inorganic Compounds
B* – Nitrates **C** – Synthetic Organic Compounds
C* – Pesticides **D** – Volatile Organic Compounds

No.	Question	Response	A	B	B*	C	C*	D
1	Is any well under the influence of surface water?	No	0	0	0	0	0	0
2	Do all PWS wells meet KS PWS water well construction standards?	Yes	0	0	0	0	0	0
3	Is any well less than 30 feet deep?	No	0	0	0	0	0	0
4	Is gravel pack within 20 feet of any well surface?	No	0	0	0	0	0	0
5	Does a PWS own or control all the areas around the wells?	Yes	0	0	0	0	0	0
6	Does Zone B consist entirely of native grass?	No	2	2	2	2	2	2
7	Is there a contaminated well in Zone B?	No	0	0	0	0	0	0
8	Is a class V UIC well present?	Yes	1	1	1	1	1	1
9	Are any commercial, industrial, or urban areas present in Zone B?	Yes	1	1	1	1	1	1
10	Does each industrial/commercial site and urban area have a water quality protection plan in place?	No	1	1	1	1	1	1
11	Are any non-farm home sites present in Zone B?	Yes	1	0	1	0	1	0
12	Do all the non-farm home sites have a water quality protection plan?	No	1	0	1	0	1	0
13	Are any farmsteads present in Zone B?	Yes	1	1	1	1	1	1
14	Do all farmsteads have a water quality protection plan?	No	1	1	1	1	1	1
15	Is there grazing livestock in Zone B?	Yes	1	0	1	0	0	0
16	Have all livestock producers implemented water quality protection measures?	No	1	0	1	0	0	0
17	Is there livestock confinement in Zone B?	No	0	0	0	0	0	0

No.	Question	Response	A	B	B*	C	C*	D
18	Is each confined animal feeding operation registered with KDHE?	Yes	0	0	0	0	0	0
19	Is there corn or grain sorghum production in Zone B?	Yes	0	0	1	0	1	0
20	Are corn/grain sorghum nutrient and pesticide management plans in use for each site?	No	0	0	1	0	1	0
21	Are any orchards present in Zone B?	No	0	0	0	0	0	0
22	Are orchard nutrient and pesticide management plans in use for each site?	Yes	0	0	0	0	0	0
23	Are there unsewered developments (concentrations of lagoons or septic systems) present in Zone B?	No	0	0	0	0	0	0
24	Is there a railroad or major highway in Zone B or C?	Yes	0	1	1	1	1	1
25	Is there oil production in Zone B or C?	Yes	0	1	0	1	0	1
26	Do coarse textured soils predominate Zones A, B and C?	Yes	1	1	1	1	1	1
27	Is an irrigation well located in Zone B or C?	Yes	0	1	1	1	1	1
28	Is a wastewater treatment facility in Zone B or C?	Yes	1	1	1	1	1	1
29	Is a solid waste landfill in Zone B or C?	Yes	1	1	1	1	1	1
30	Are there unplugged, abandoned water wells present in Zone C?	Yes	2	1	1	1	1	1
31	Are any commercial, industrial, or urban area present in Zone C?	Yes	1	1	1	1	1	1
32	Does each industrial/commercial site and urban area have a water quality protection plan in place?	No	1	1	1	1	1	1
33	Is there livestock confinement in Zone C?	Yes	1	1	1	1	1	0
34	Is each confined livestock facility registered with KDHE?	Yes	0	0	0	0	0	0
35	Do all the livestock producers have water quality protection measures in place?	No	1	0	1	0	0	0
36	Are cropland nutrient management plans in place?	No	0	0	1	0	0	0
37	Are cropland pesticide management plans in place?	No	0	0	0	0	1	0
38	Does a perennial stream flow into Zone C?	Yes	1	1	1	1	1	1
39	Are watershed water quality protection plans in place?	No	1	1	1	1	1	1

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Site Comments:

The Site Comments section lists all the comments that were added for the potential sources of contamination found in the assessment area.

Local comments and feedback from people that are familiar with the assessment area is an important aspect of the assessment. The comments greatly improve the assessment by adding detail to the sites that can be referenced for more information.

This local information may include comments on potential contamination threats (or lack there of), local water quality protection initiatives, etc. Adding comments are optional and are mainly focused on sources in areas that could have the greatest impact on water supply if a spill or release occurred in the environment. It is left to the discretion of the PWS and/or source water assessment committee to add comments.

Site Comments

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Comments for Unregulated Sites

Did Not Receive Any Comments

Comments for Regulated Confined Animal Feeding Operations Sites

Potential Contaminant Site Name	Site No.	Site Comments	Author
Sunflower Farms	2001390	This swine facility has no groundwater monitoring.	Nicole Fisher

Comments for Regulated Hazardous Waste Sites

Did Not Receive Any Comments

Comments for Regulated Leaking Storage Tank Sites

Did Not Receive Any Comments

Comments for Regulated Identified Contaminated Sites

Did Not Receive Any Comments

Comments for Regulated Solid Waste Sites

Did Not Receive Any Comments

Comments for Regulated Waste Water Sites

Potential Contaminant Site Name	Site No.	Site Comments	Author
BLUE TOWNSHIP	6000253	only one plant.	Steven DeHart

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Added Site Comments:

The Added Site Comments section lists the comments for why sites were added as a potential source of contamination found to the assessment area.

Added Site Comments

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Comments for Added Contaminant Sites

Added Contaminant Site Name	Site No.	Site Comments	Author
Did Not Receive Any Comments			

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Analysis Question Comments:

The Analysis Question Comments section lists all the comments that were added during analysis portion of the assessment, in which a series of yes/no questions were asked.

Evaluators have the option to add comments to questions to clarify why a response was given or to give more details to a question. Local comments and feedback from people that are familiar with the assessment area is an important aspect of the assessment. The comments greatly improve the assessment by adding clarification and details that could not be identified with a simple yes or no response.

Analysis Question Comments

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Comments for Analysis Questions

Analysis Question	Question Comments	Author
Did Not Receive Any Comments		